

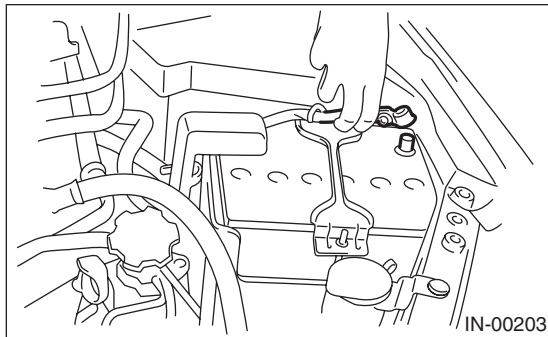
General Description

AIRBAG SYSTEM (DIAGNOSTICS)

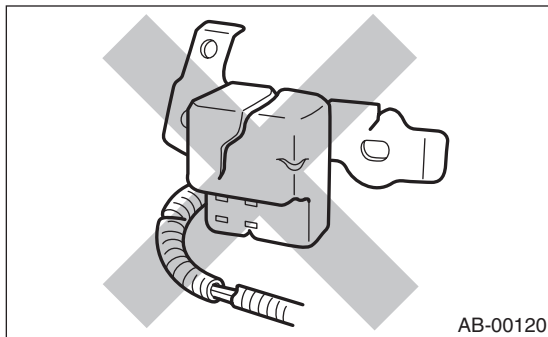
3. General Description

A: CAUTION

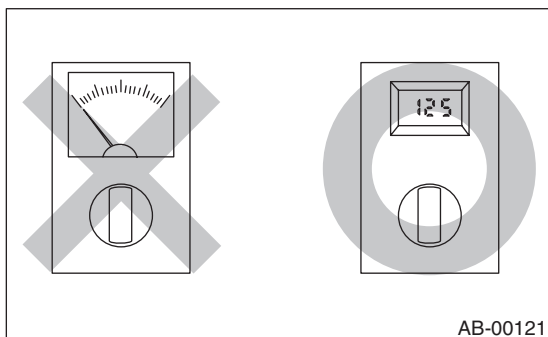
- When servicing a vehicle, be sure to turn the ignition switch to OFF, disconnect the ground cable from battery, and wait for more than 20 seconds before starting work.
- The airbag system is fitted with a backup power source. If the airbag system is serviced within 20 seconds after the ground cable is disconnected, it may inflate.



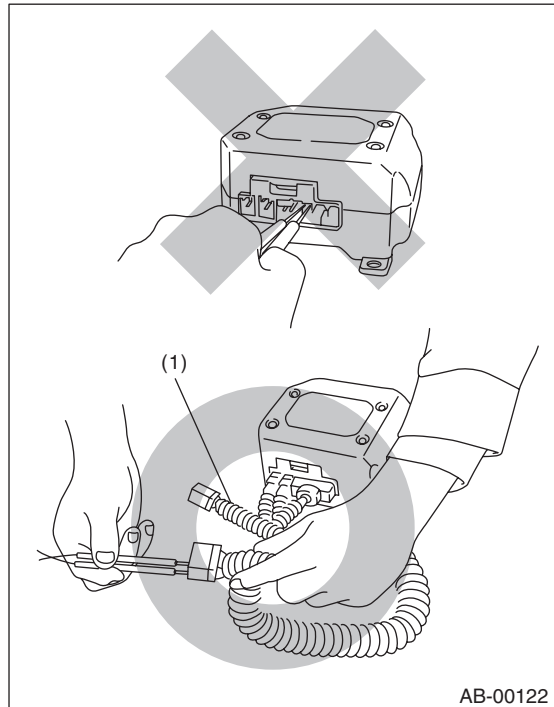
- If sensors, airbag module, airbag control module, pretensioner or harness is deformed or damaged, replace them with new genuine parts.



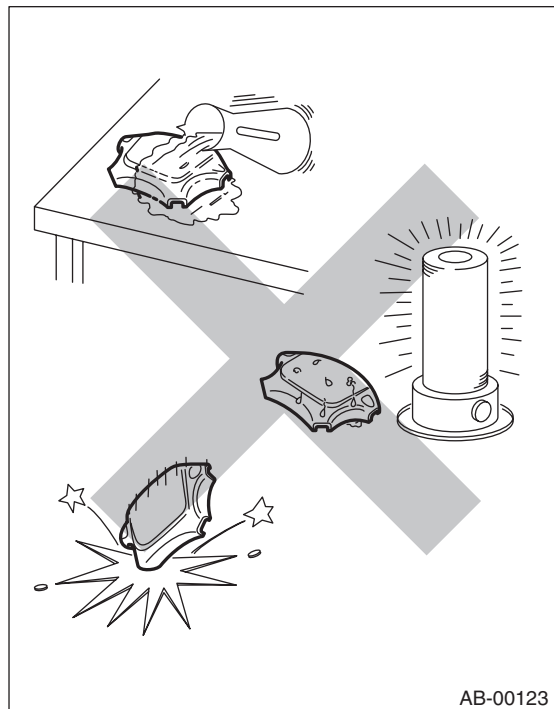
- Do not use the airbag system and pretensioners on other vehicles. When replacing parts, be sure to replace them with new parts.
- When checking the airbag system, be sure to use a digital circuit tester. Use of an analog circuit tester may cause the airbag to activate erroneously due to a minimal current inside tester.



- When checking, use a test harness (1). Damage to connector terminal causes malfunction. Do not directly put the tester probe on airbag connector terminal.



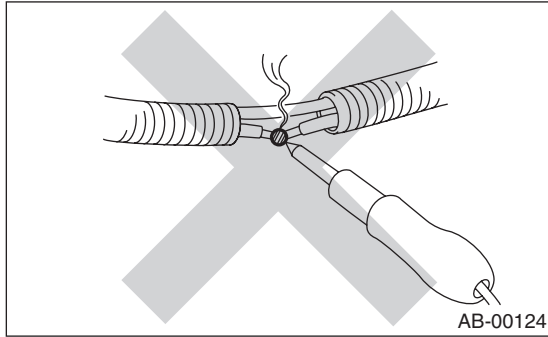
- Do not drop the airbag system parts, or keep them at high temperature over 93°C (199°F), or let water, oil or grease get on them; the internal parts may be damaged and reliability greatly lowered.



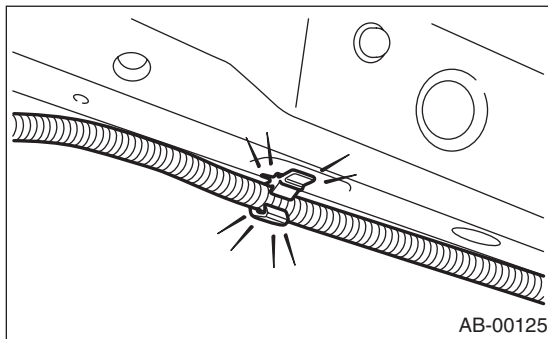
General Description

AIRBAG SYSTEM (DIAGNOSTICS)

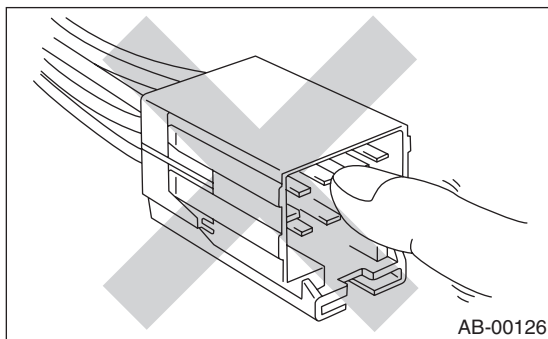
- If damage, open circuit or rust is found on airbag system wiring harness, do not use a soldering equipment to repair. Replace the faulty harness with a new genuine part.



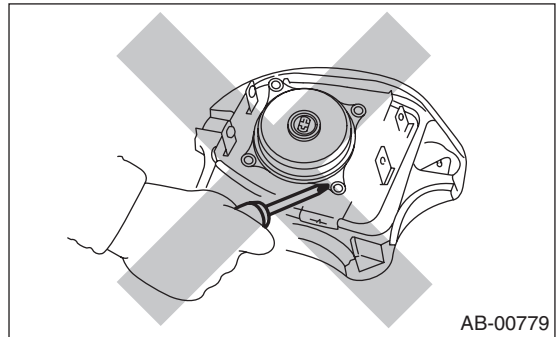
- Install the wiring harness securely with the specified clips to avoid interference or tangled with other parts.



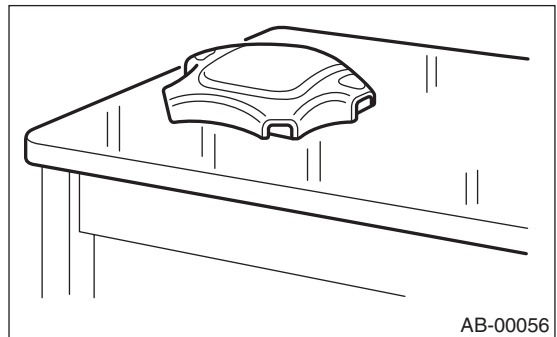
- Do not allow water or oil to come in contact with the connector terminals. Also, do not touch the connector terminals.



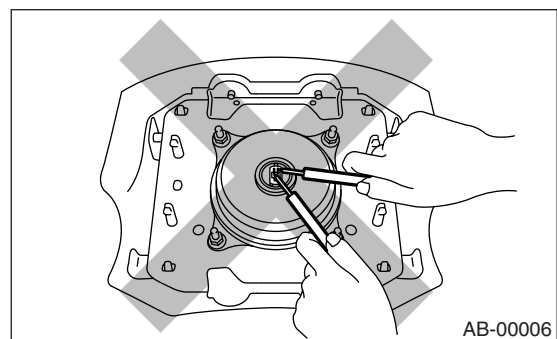
- Either of the airbag modules for driver's, passenger's, side or curtain, or the pretensioner must not be disassembled.



- The airbag module cannot be used again if deployed once.
- After removal, keep the airbag module with the pad side facing upward on a dry, clean and flat surface away from heat, light sources, moisture and dust.



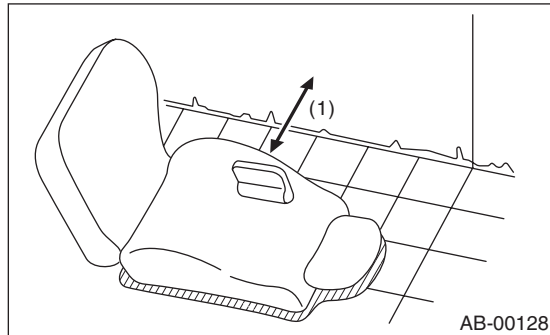
- Do not check continuity of the airbag modules for driver's side, passenger's side and curtain, or the pretensioner.



General Description

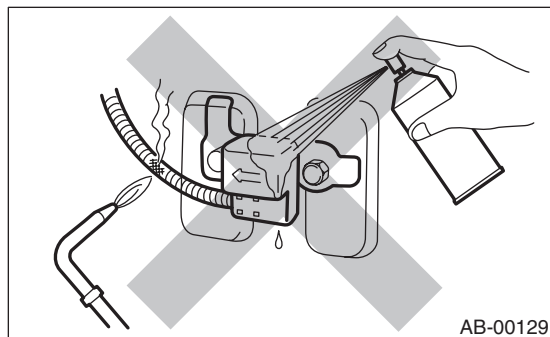
AIRBAG SYSTEM (DIAGNOSTICS)

- The removed front seat with airbag module must be kept at least 200 mm (8 in) away from walls and other objects.



(1) 200 mm (8 in) or more

- When painting or performing sheet metal work on the front part of the vehicle, including the front wheel apron, front fender and front side frame, remove the front sub sensors and wiring harness of airbag system.
- When painting or performing sheet metal work on the side of the vehicle, including the side sill, center pillar and front and rear doors, remove the side airbag sensors and wiring harness of the airbag system.



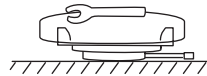
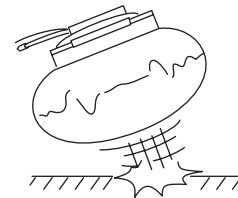
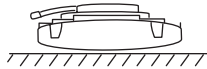
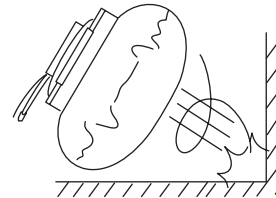
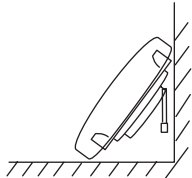
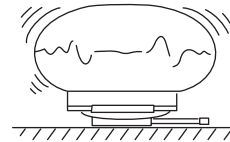
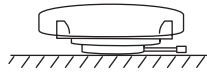
- Do not discard undeployed airbag module. They could easily cause a serious accident if accidentally deployed.

General Description

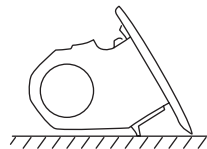
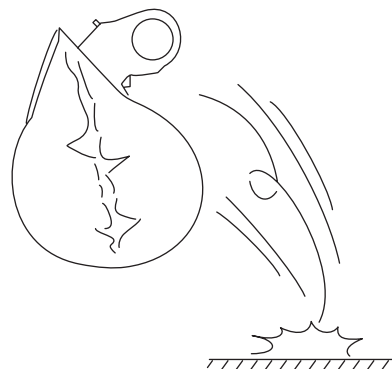
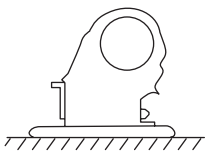
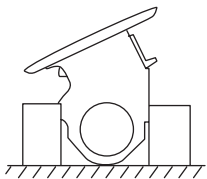
AIRBAG SYSTEM (DIAGNOSTICS)

- When storing a removed airbag module, do not place any objects on it or stack other airbag modules on top of each other. If the airbag inflates for some reason when it is placed with its pad side facing downward or under any object, a serious accident may result.

(1)



(2)



AB-00130

(1) Driver's airbag module

(2) Passenger's airbag module

B: INSPECTION

Measure the battery voltage and check electrolyte.

Standard voltage: 12 V

Specific gravity: Above 1.260

General Description

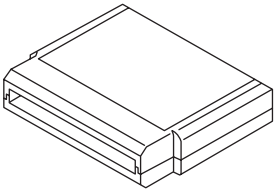

AIRBAG SYSTEM (DIAGNOSTICS)

C: PREPARATION TOOL

CAUTION:

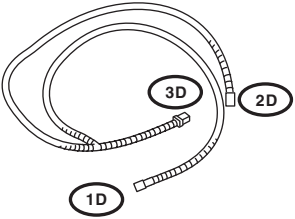
To measure the voltage and resistance of airbag system component, be sure to use the specified test harness.

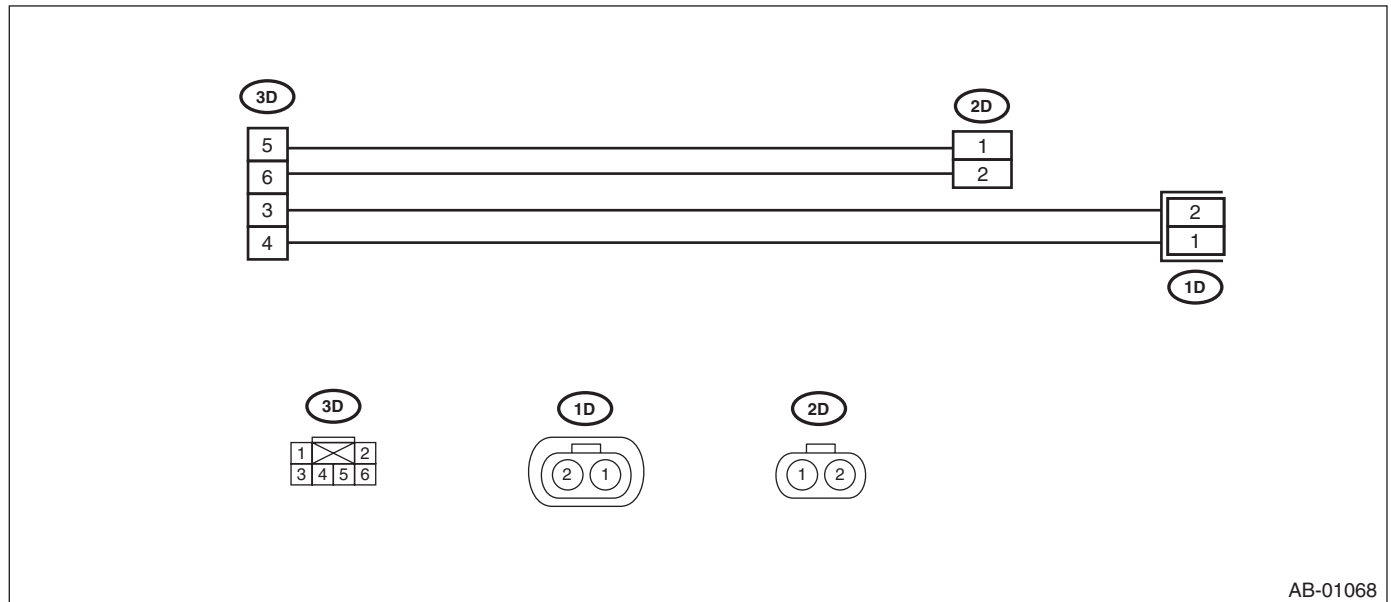
1. SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST18482AA010	18482AA010	CARTRIDGE	Troubleshooting for electrical system.
 ST22771AA030	22771AA030	SUBARU SELECT MONITOR KIT	Troubleshooting for electrical system.

General Description

- TEST HARNESS D

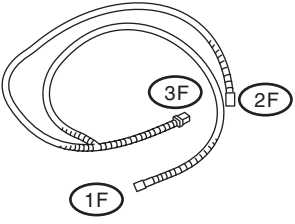
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="321 556 467 577">ST98299AG060</p>	98299AG060	TEST HARNESS D	Used when measuring voltage and resistance of front seat belt buckle switch.

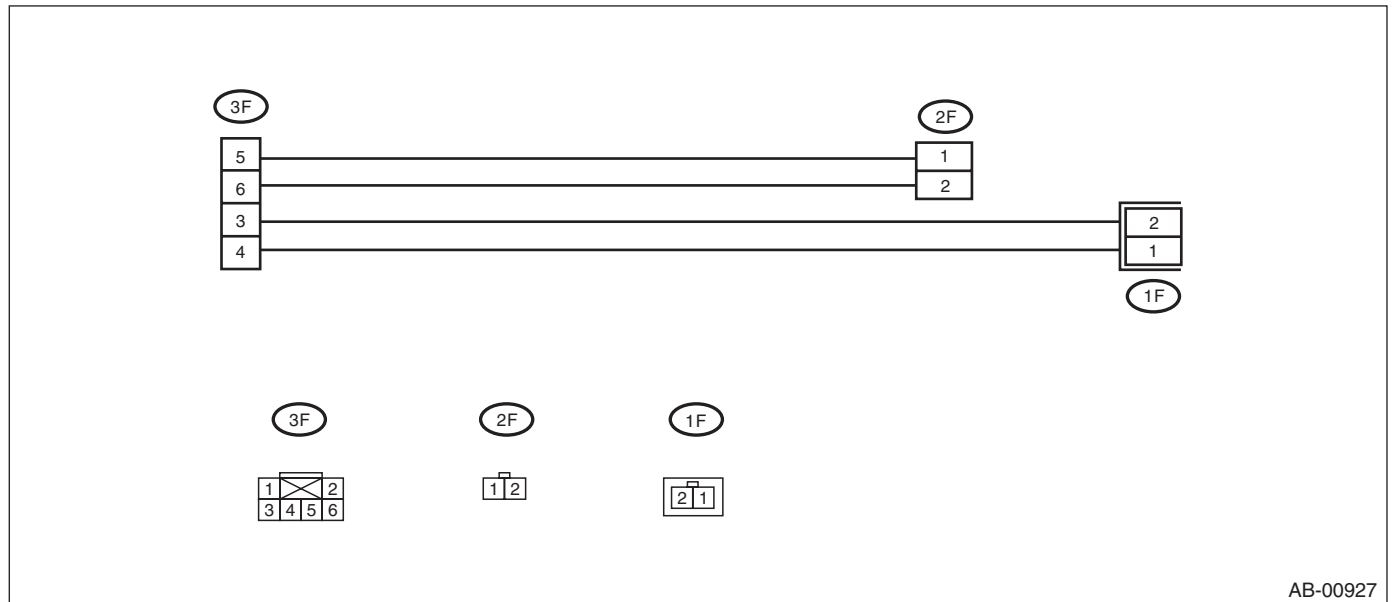


General Description

AIRBAG SYSTEM (DIAGNOSTICS)

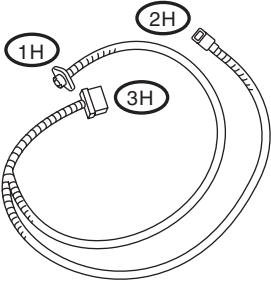
- TEST HARNESS F

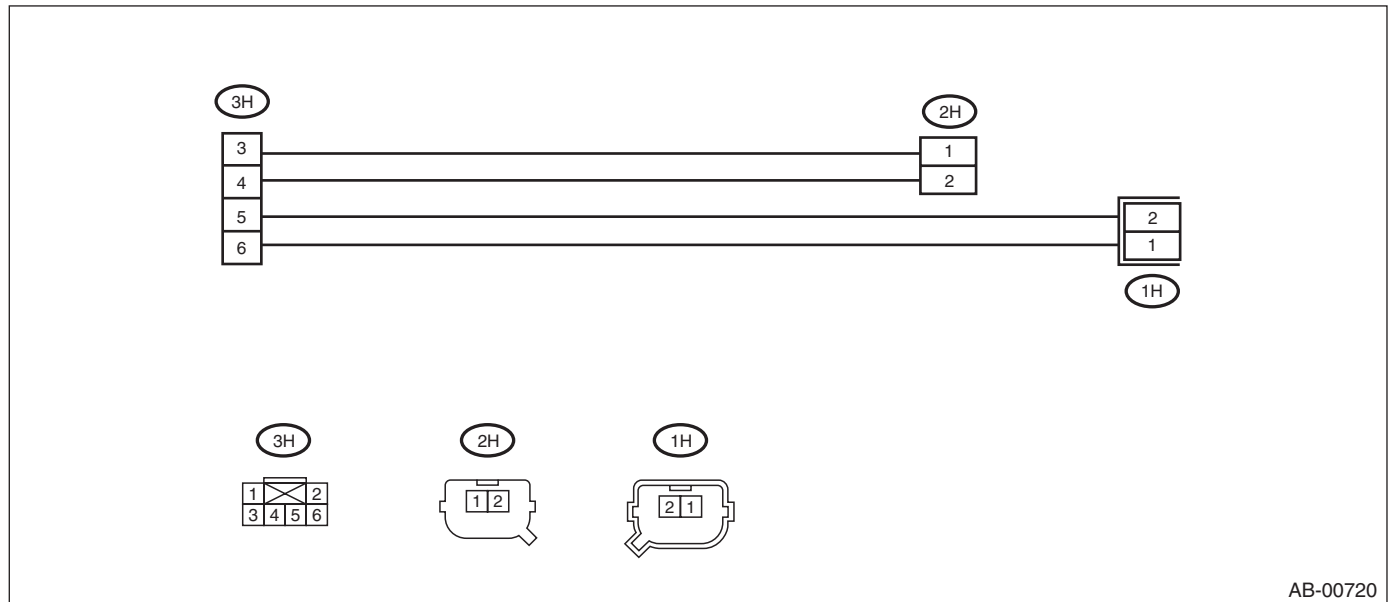
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299FC010</p>	98299FC010	TEST HARNESS F	Used when measuring voltage and resistance of airbag module harnesses.



General Description

• TEST HARNESS H

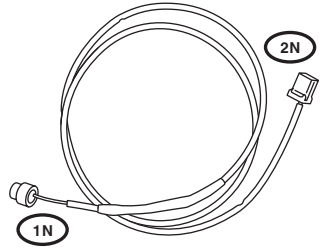
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299FA030</p>	98299FA030	TEST HARNESS H	Used when measuring voltage and resistance of front sub sensor.

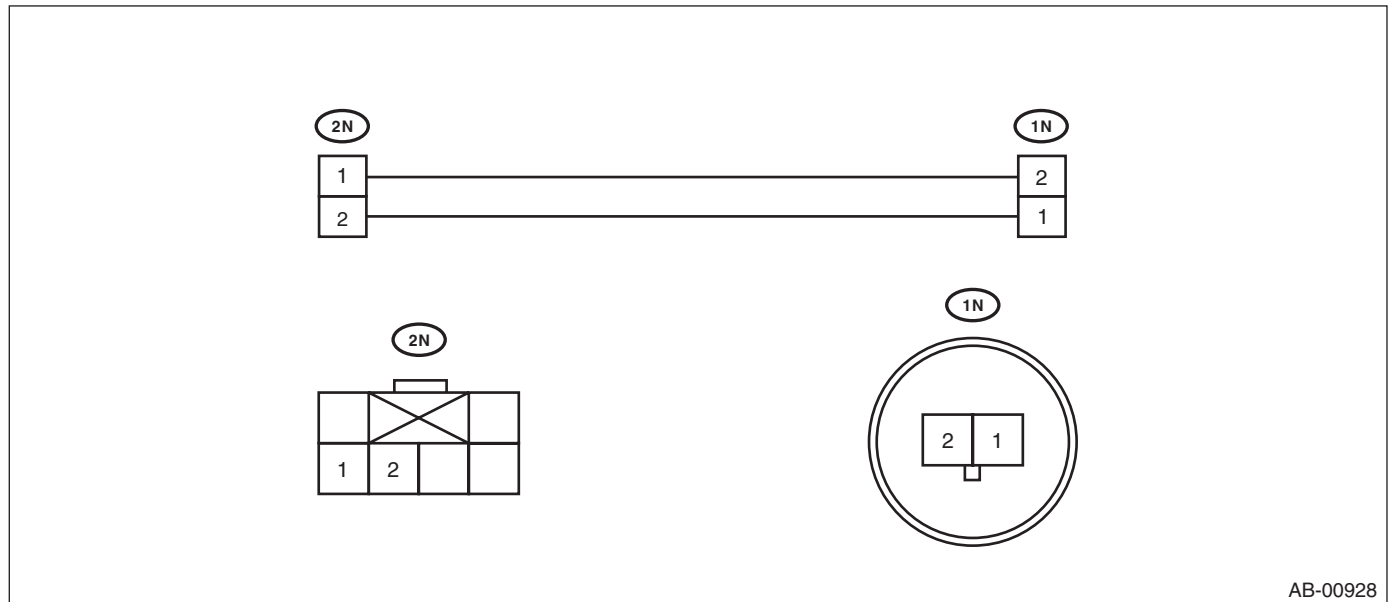


General Description

AIRBAG SYSTEM (DIAGNOSTICS)

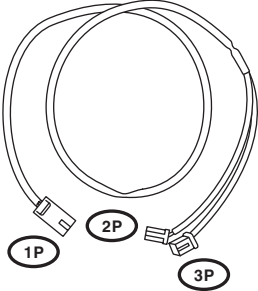
- TEST HARNESS N

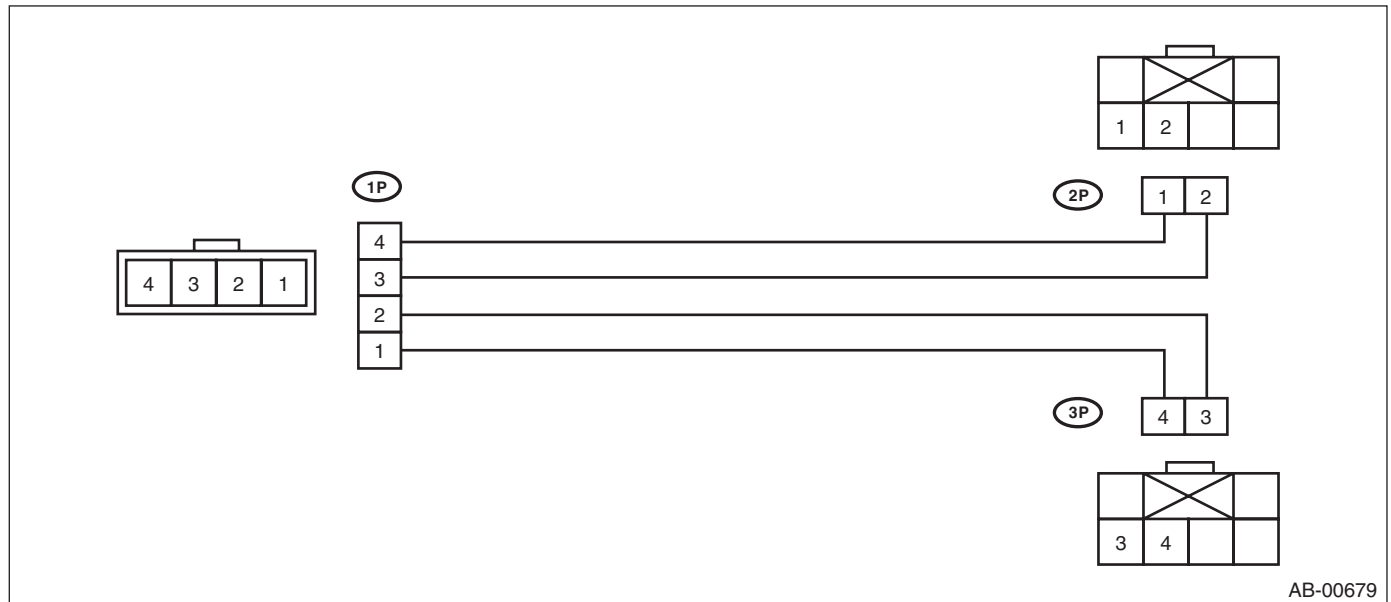
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299SA000</p>	98299SA000	TEST HARNESS N	Used when measuring voltage and resistance of driver's airbag module and seat belt pretensioner.



General Description

• TEST HARNESS P

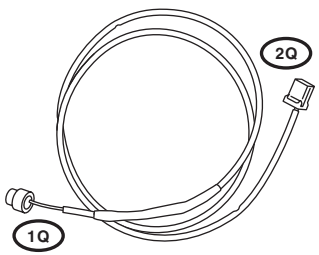
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="326 558 467 579">ST98299SA020</p>	98299SA020	TEST HARNESS P	Used when measuring voltage and resistance of driver's airbag module harness and passenger's airbag module harness.

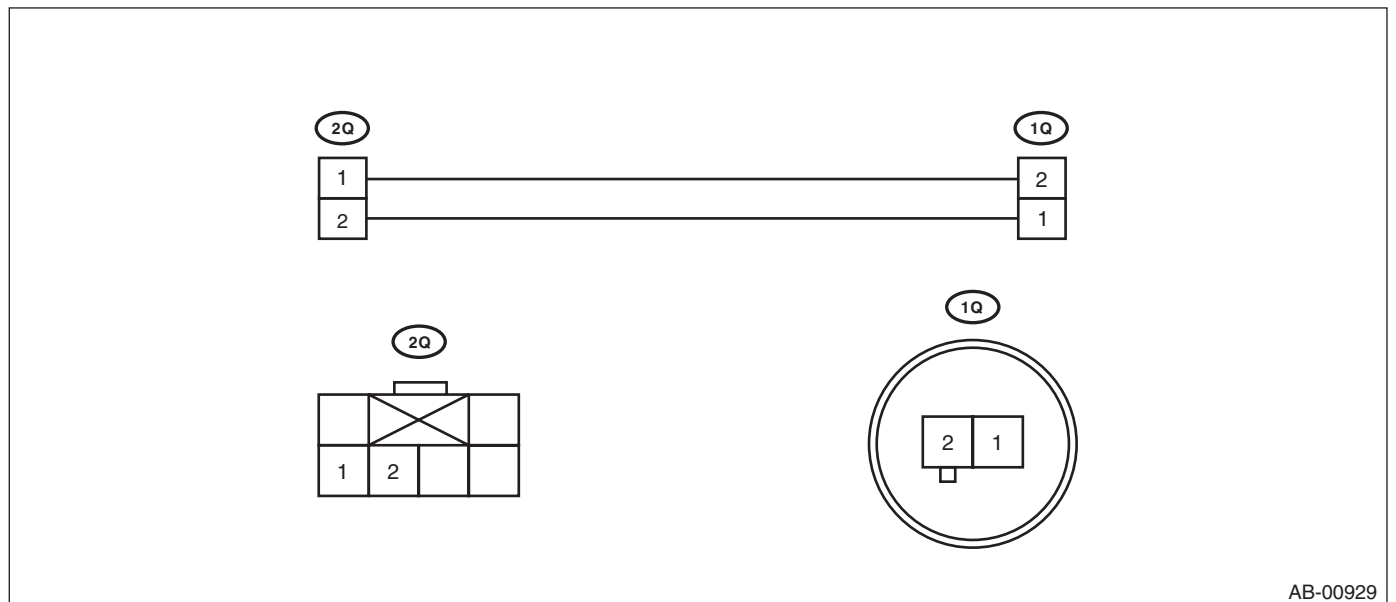


General Description

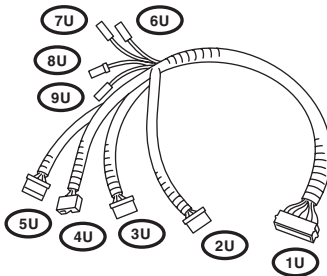
AIRBAG SYSTEM (DIAGNOSTICS)

• TEST HARNESS Q

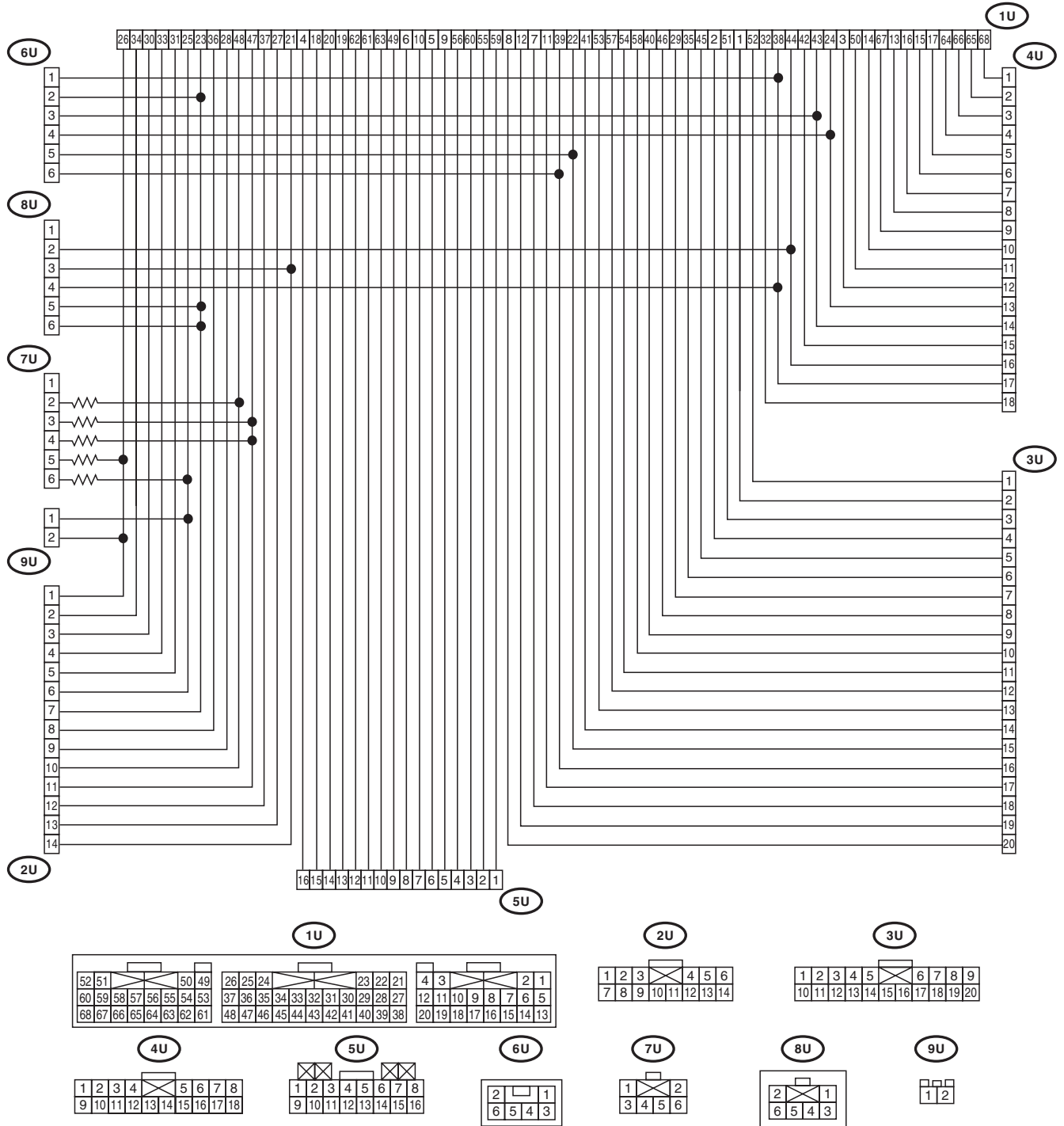
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299SA040</p>	98299SA040	TEST HARNESS Q	Used when measuring voltage and resistance of driver's airbag module.



• TEST HARNESS U

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299AG000</p>	98299AG000	TEST HARNESS U	Used when measuring voltage and resistance of airbag control module.

General Description

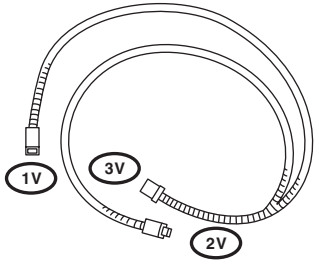


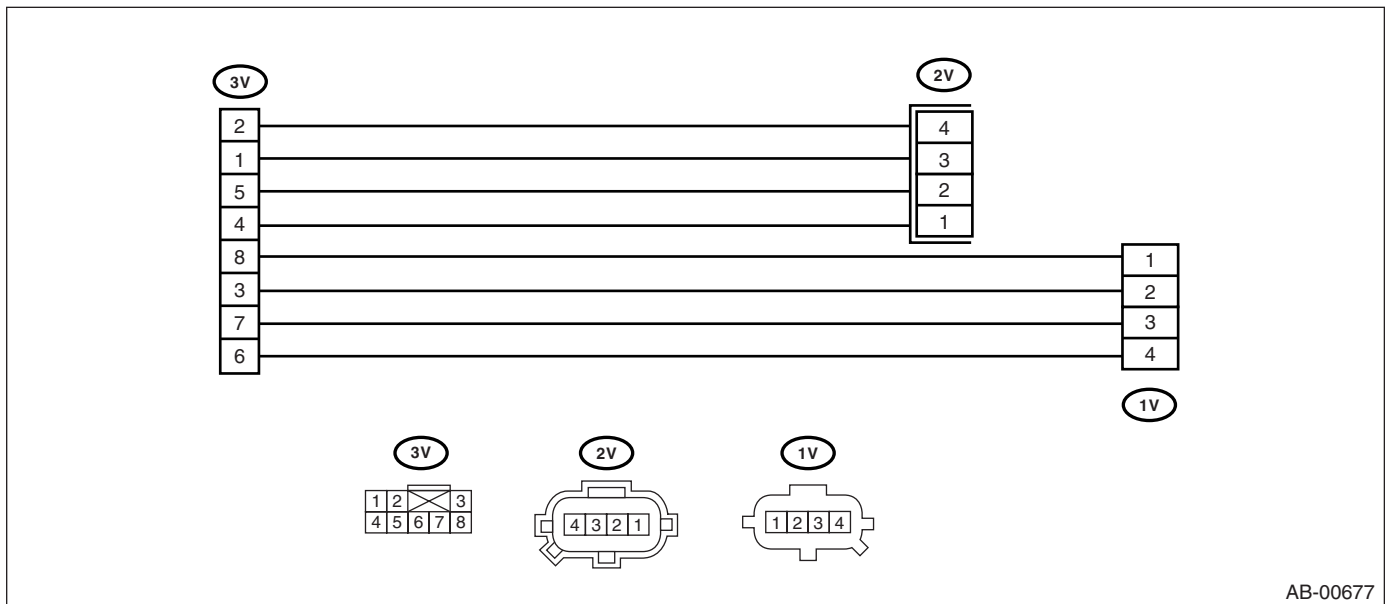
AB-00930

General Description

AIRBAG SYSTEM (DIAGNOSTICS)

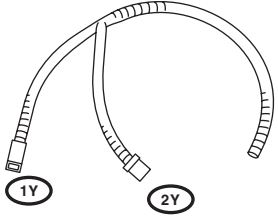
- TEST HARNESS V

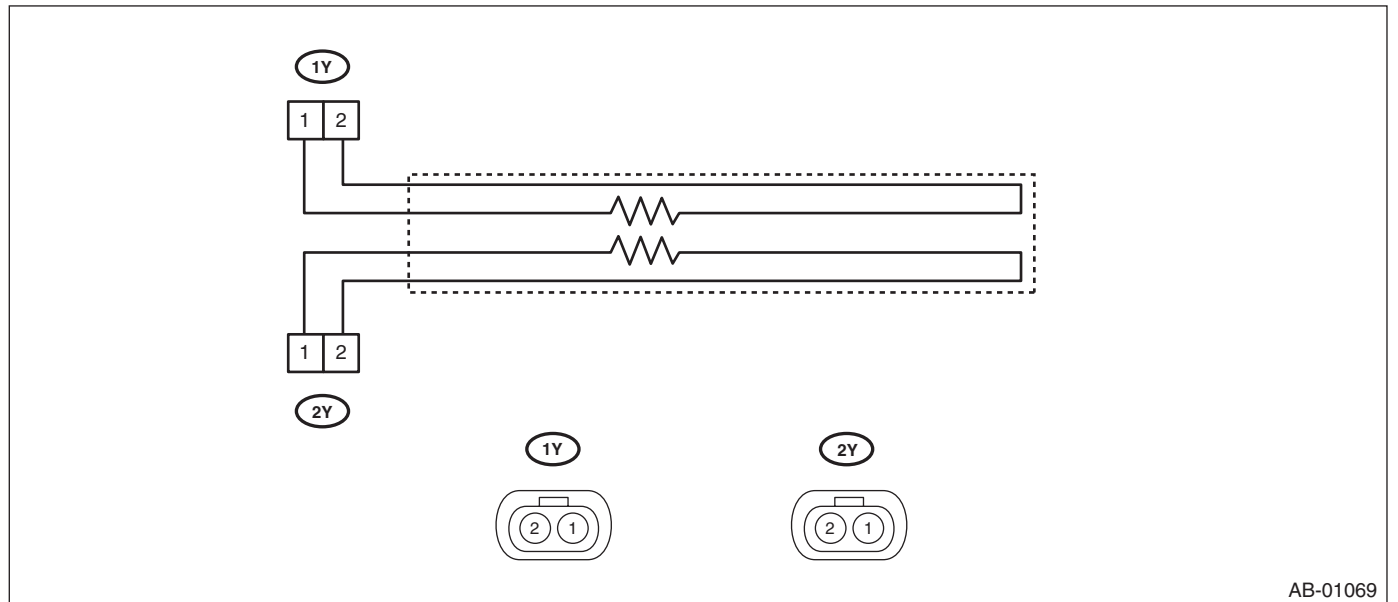
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299AG010</p>	98299AG010	TEST HARNESS V	Used when measuring voltage and resistance of side airbag sensor and curtain airbag sensor.



General Description

- TEST HARNESS Y

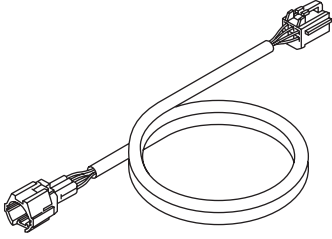
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="321 556 467 577">ST98299AG040</p>	28299AG040	TEST HARNESS Y	Used for diagnosing seat belt buckle switch.

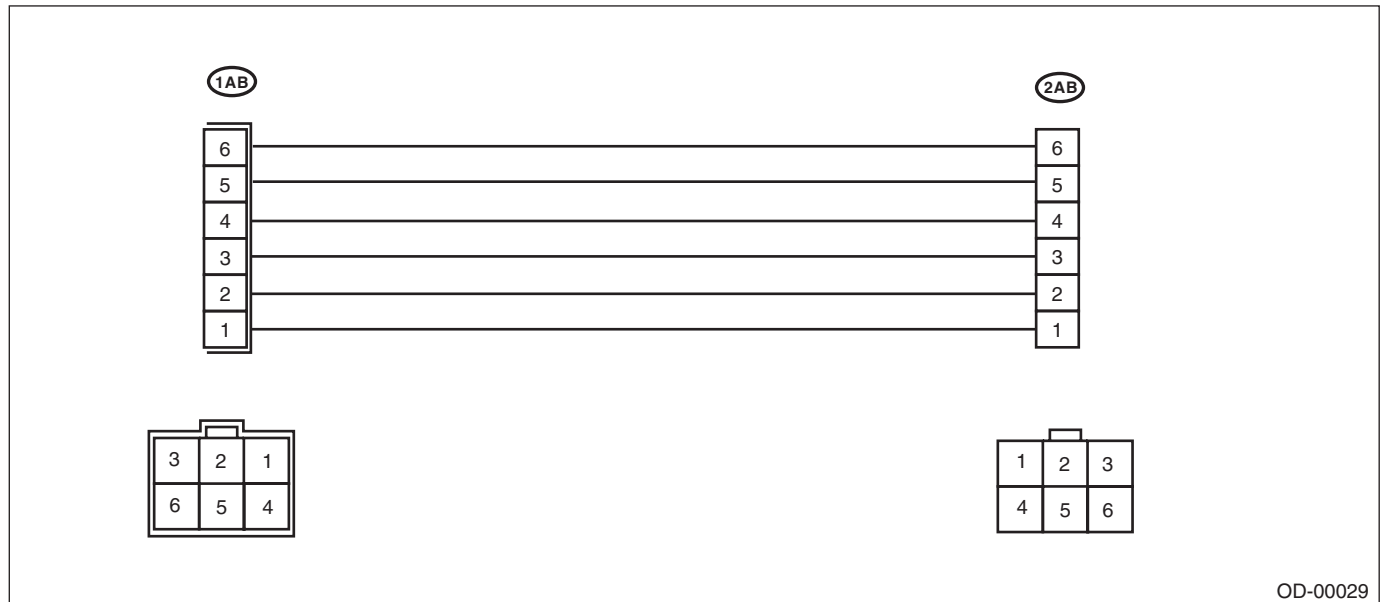


General Description

AIRBAG SYSTEM (DIAGNOSTICS)

- TEST HARNESS AB

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299XA000</p>	98299XA000	TEST HARNESS AB	Used when measuring voltage and resistance of occupant detection system.

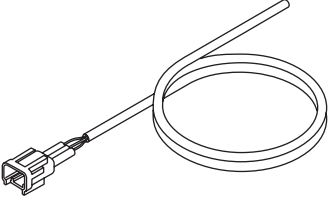


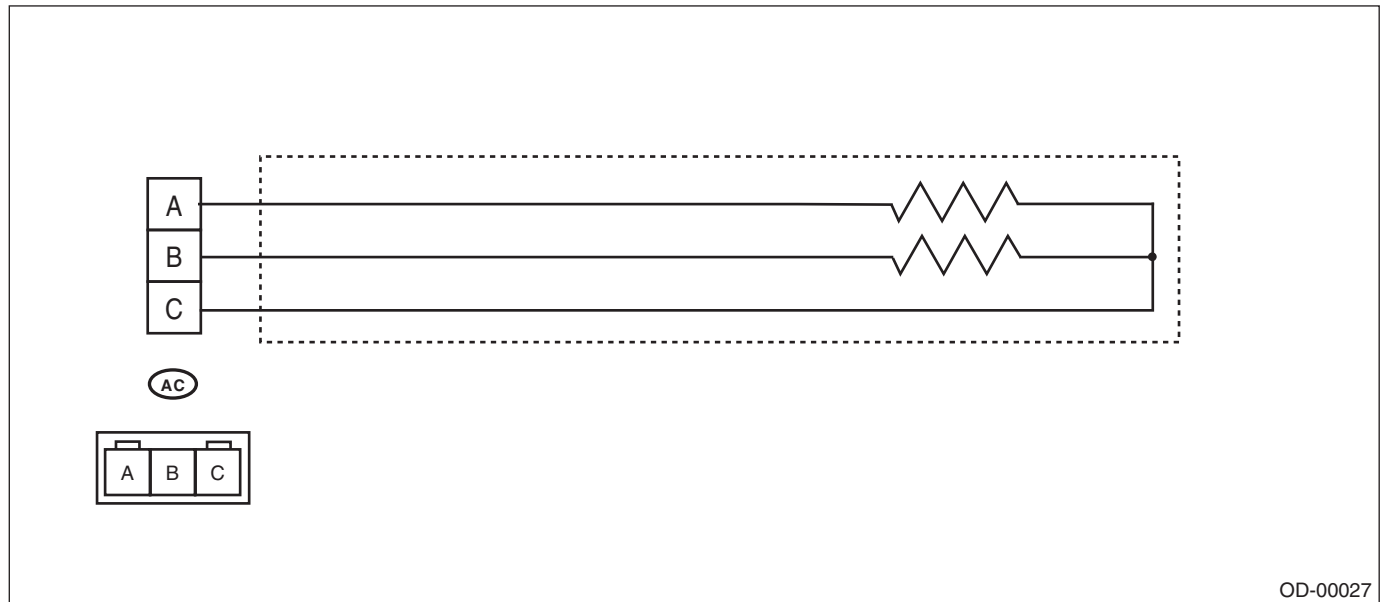
OD-00029

General Description

AIRBAG SYSTEM (DIAGNOSTICS)

- TEST HARNESS AC

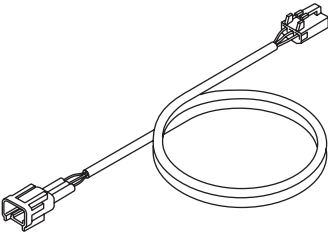
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299XA010</p>	98299XA010	TEST HARNESS AC	Used for diagnosing a failure of the seat belt tension sensor.

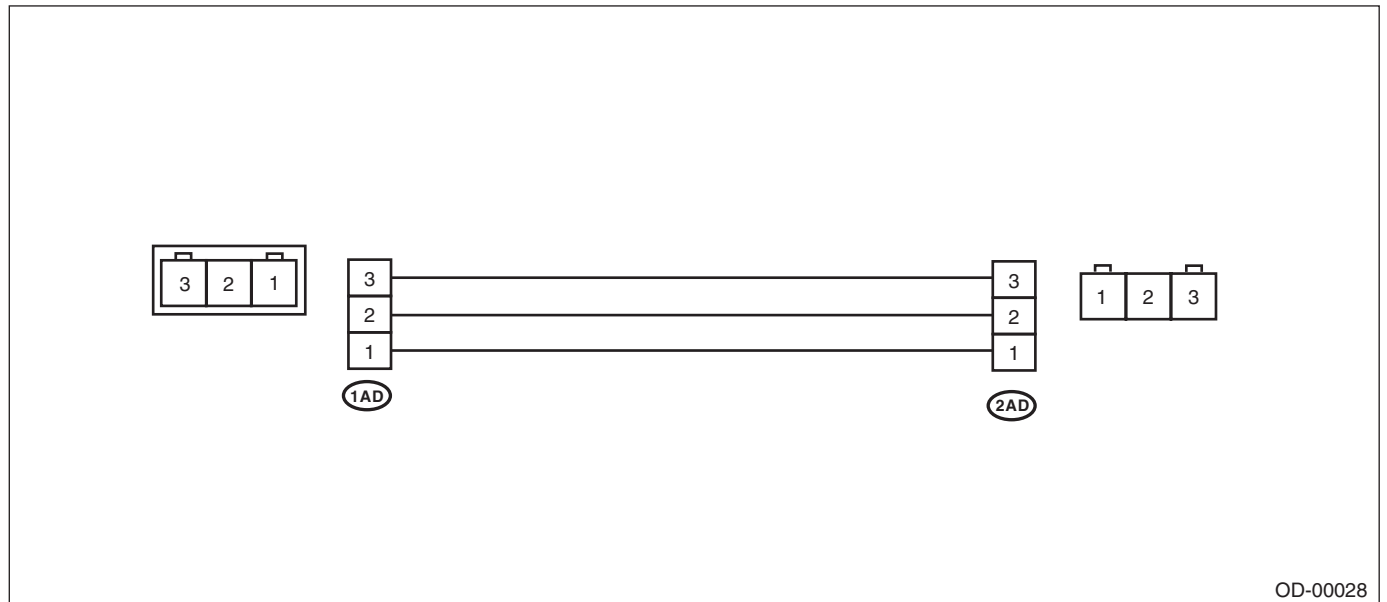


General Description

AIRBAG SYSTEM (DIAGNOSTICS)

- TEST HARNESS AD

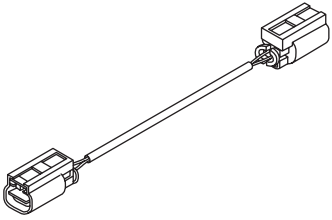
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="324 556 467 579">ST98299XA020</p>	98299XA020	TEST HARNESS AD	Used when measuring voltage and resistance of seat belt tension sensor.

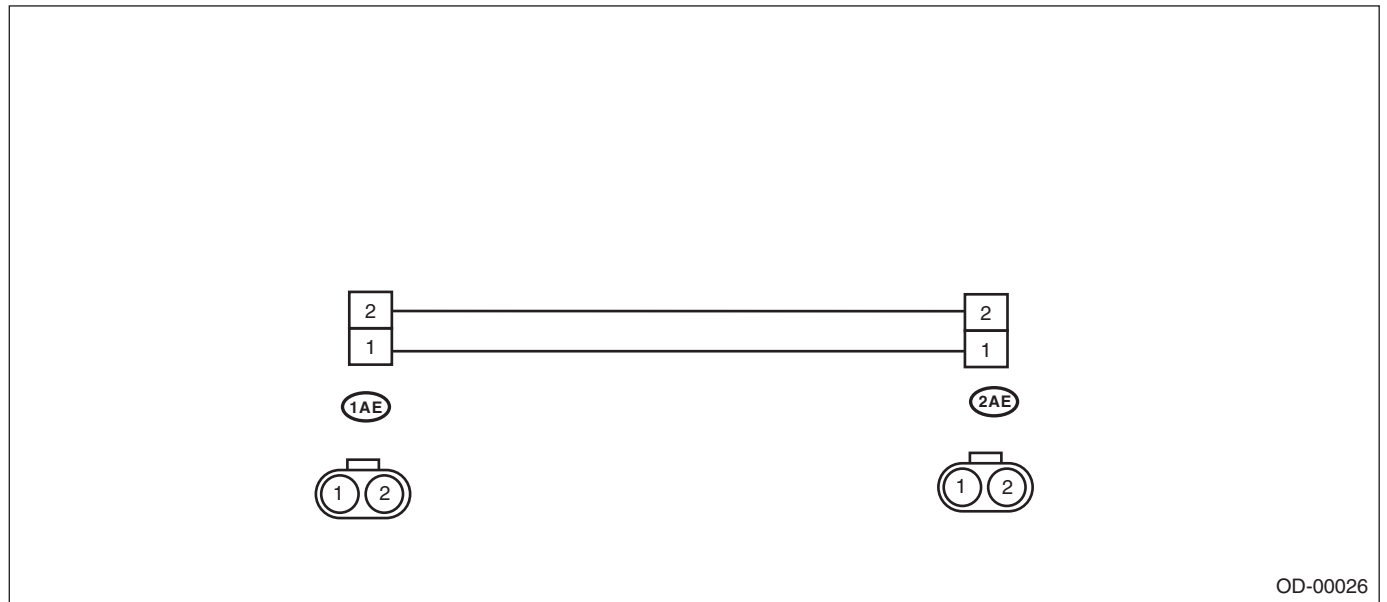


General Description

AIRBAG SYSTEM (DIAGNOSTICS)

• TEST HARNESS AE

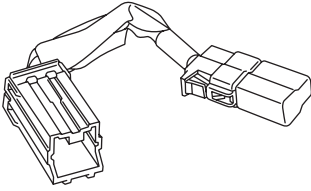
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="324 556 467 579">ST98299XA030</p>	98299XA030	TEST HARNESS AE	<ul style="list-style-type: none"> • Used for diagnosing a failure of the seat belt tension sensor. • Used together with the test harness Y.

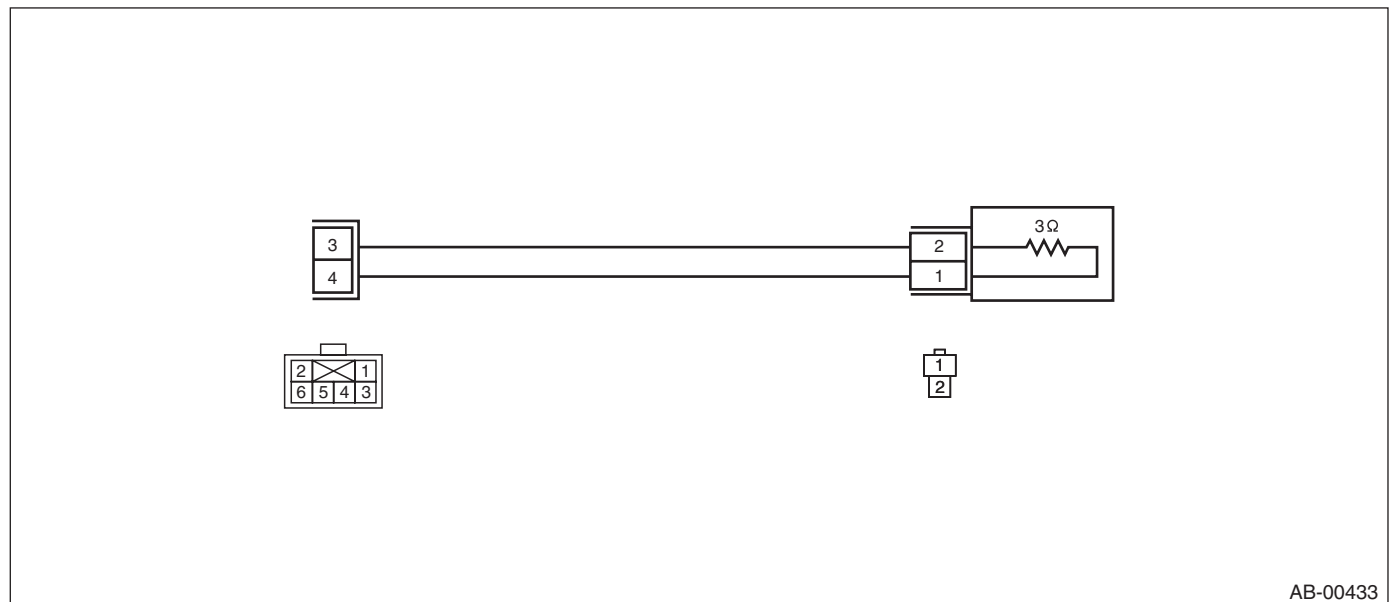


General Description

AIRBAG SYSTEM (DIAGNOSTICS)

• AIRBAG RESISTOR

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299PA040</p>	98299PA040	AIRBAG RESISTOR	Used in replacement of airbag module for which resistance value is same as airbag module.



2. GENERAL TOOL

TOOL NAME	REMARKS
Circuit tester	Used for measuring resistance, voltage and current.
Oscilloscope	Used for measuring the sensor.